

Appendix A: Optional Serial Port Information

CONNECTING THE SERIAL DEVICE

The COM1 serial port is a full duplex RS-232 port designed for connection to a host computer. Figure A-1 shows the serial port pinout. Figure A-2 shows a suggested cable diagram for a PC-type computer. The cable shown in Figure A-2 is a standard Transcell cable – Model NMC-1.

1. Plug the serial device cable (not included) directly into the DSUB9 serial port connector.

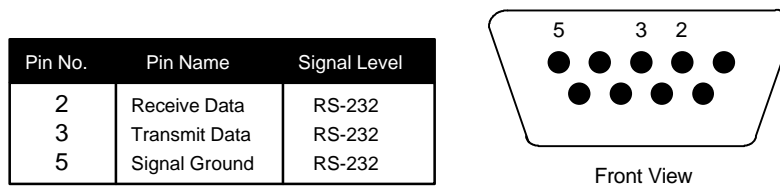


Figure A-1: Pin assignments for the COM1 serial port connector

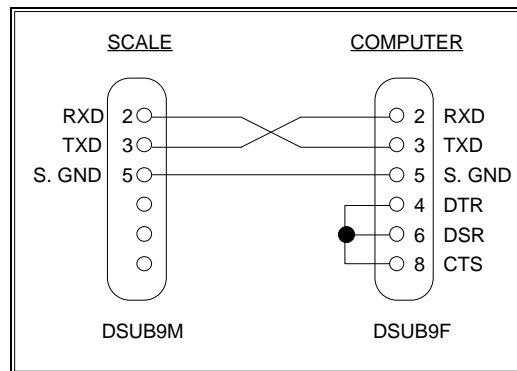


Figure A-2: Cable Diagram for Scale to Computer

COMMUNICATION SETTINGS

The ESW scale has the following fixed communication settings:
Baud: 9600, Data Bits: 8, Parity: None, Stop Bits: 1

More →

COMMUNICATION PROTOCOL

The ESW uses a demand type of serial communication protocol for its serial interface port. A host device must send a single ASCII character command to the scale. If the scale is not in an error state, it will accept and act upon that command. If the scale is in an error state, it will not respond at all. Error conditions include motion and overload.

The ASCII character commands are summarized in Table A-1. The serial data format for the "P" or "PRINT" command (oz/g) is shown in Figure A-3. The serial data format for the "P" or "PRINT" command (lb-oz) is shown in Figure A-4.

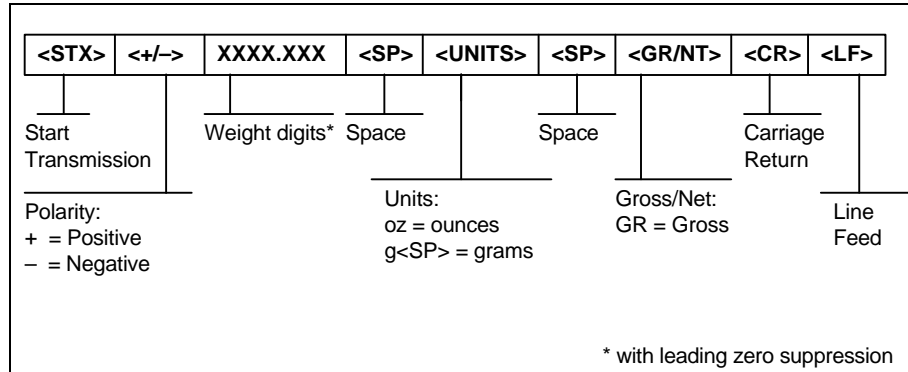


Figure A-3: Serial Data Format for "PRINT" Command (g/oz)

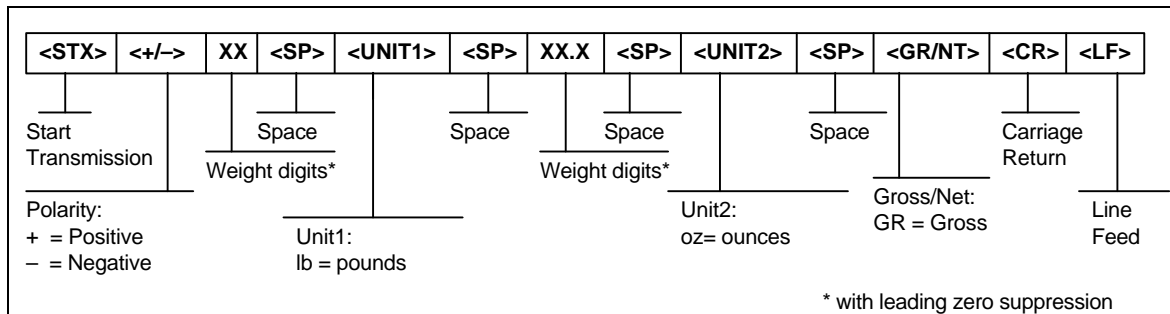


Figure A-4: Serial Data Format for "PRINT" Command (lb-oz)

ASCII Character Command	Function	Error States (Scale won't respond)
"P" or "p"	Print displayed data to serial port in format shown in Figure 1-1	1. Scale Overload 2. Scale in Motion
"Z" or "z"	Zeroes the scale	1. Scale Overload 2. Scale in Motion
"C" or "c"	Toggles scale among oz, g, and lb-oz units.	None

Table A-1: Summarization of ASCII Character Commands